AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Page 3, paragraph comprising lines 21-28:

In the method of the present invention, an optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ is determined, according to an equation $\cancel{Vd(t) = V_o(t-1) + ODV}$ $\underline{V_d(t) = V_o(t-1) + ODV}$, wherein the ODV is a minimum voltage capable of obtaining one gray level transition in a determined response time. ~~An~~ A dynamic gray level data $G_d(t)$ is then determined according to an equation $\cancel{Vd(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$ $\underline{V_d(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$, wherein a is -0.0004, b is 0.0037, c is -0.1443, and d is 8.6992. Next, the optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ is produced according to the dynamic gray level data $G_d(t)$. Finally, the pixel is driven with the optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ to change the ~~forward~~ pixel forward to a state corresponding to $G_o(t)$.

Page 4, paragraph comprising lines 3-19

Another aspect of the present invention provides an apparatus for gray level dynamic switching applied to drive a display with a pixel. The apparatus comprises a memory set, a processor and a driving circuit. The memory set stores a previous gray level $G_o(t-1)$ that represents the desired gray level of the pixel at time frame t-1. The processor determines an over-driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ according to a current gray level $G_o(t)$and an equation $\cancel{Vd(t) = V_o(t-1) + ODV}$ $\underline{V_d(t) = V_o(t-1) + ODV}$, and determines ~~an~~ a dynamic gray level data $G_d(t)$ according to an equation $\cancel{Vd(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$

$\underline{V_d(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$, wherein ~~Go(t)~~ $\underline{G_o(t)}$ represents the desired level of the pixel at time frame t, the voltage ODV is a minimum voltage capable of obtaining one gray level transition in a determined response time, a is -0.0004, b is 0.0037, c is -0.1443, and d is 8.6992. The driving circuit receives $G_d(t)$ and correspondingly generates the optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ to drive the pixel to change the ~~forward~~ pixel forward to a current state corresponding to $G_o(t)$.

Paragraph bridging pages 4 and 5

Another aspect of the present invention provides a display system comprising a display, a memory, and a processor. The display has at least one pixel. The memory stores a program. According to the program in the memory, the processor receives an original gray level sequence S_o consisting of two or more original gray levels $G_o(1),\ldots,G_o(T)$. The processor then transforms S_o to an adjusted gray level sequence S_d consisting of two or more adjusted gray levels $G_d(1),\ldots,G_d(M)$, an adjusted gray level $G_d(m)$ being generated according to a relevant sub-sequence comprising $G_o(t-1)$ and $G_o(t)$. In this case, an optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ is determined according to ~~Go(t)~~ $\underline{G_o(t)}$ and an equation $\cancel{Vd(t) = V_o(t-1) + ODV}$ $\underline{V_d(t) = V_o(t-1) + ODV}$, and the adjusted gray level $G_d(m)$ is determined according to an equation $\cancel{Vd(t) = a \times G_d(m)^3 + b \times G_d(m)^2 + c \times G_d(m) + d}$

$\underline{V_d(t) = a \times G_d(m)^3 + b \times G_d(m)^2 + c \times G_d(m) + d}$, wherein the voltage ODV is a minimum voltage capable of obtaining one gray level transition in a determined response time, a is -0.0004, b is 0.0037, c is -0.1443, and d is 8.6992. Next, the processor sequentially drives the pixel with driving forces corresponding to $G_d(1),\ldots,G_d(M)$ in S_d.

Paragraph bridging pages 8 and 9:

In this case of the present invention, a current gray level $G_o(t)$ and a previous gray level $G_o(t-1)$ correspond to time frames n and n-1, respectively. ~~Go(t)~~ $\underline{G_o(t)}$ corresponds to a driving voltage $V_o(t)$ to present $G_o(t)$ under a static condition. The $G_o(t-1)$ corresponds to a driving voltage $V_o(t-1)$ to present $G_o(t-1)$ under a static condition also. The relationship of the driving voltages $V_o(t-1)$ and $V_o(t)$ and the gray levels $G_o(t-1)$ and $G_o(t)$ are a gamma curve. The microprocessor can obtain the driving voltages $V_o(t-1)$ and $V_o(t)$ both according to equation 1.

Page 9, paragraph comprising lines 11-13:

Next, the processor 24 determines an optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ according to the current gray level $G_o(t)$ and the previous gray level $G_o(t-1)$, and an equation 2.

Page 10, paragraph comprising lines 1-3:

The processor 24 then determines ~~an~~ <u>a</u> dynamic gray level data $G_d(t)$ according to the equation 1 and the optimized driving voltage ~~Vd(n)~~ $\underline{V_d(t)}$.

Page 10, paragraph comprising lines 4-7:

That is, $\cancel{Vd(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$;

$\underline{V_d(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$, wherein the value and polarity of the voltage ODV are known as mentioned above, for example -0.6 V, a is -0.0004, b is 0.0037, c is -0.1443, and d is 8.6992. Thus, ~~Gd(n)~~ $\underline{G_d(t)}$ can be obtained.

Page 10, paragraph comprising lines 8-12:

Next, the driving circuit 26 produces the optimized driving voltage ~~Vd(t)~~ $V_d(t)$ according to the dynamic gray level data $G_d(t)$, and drives the pixel with the optimized driving voltage ~~Vd(t)~~ $V_d(t)$ to change the ~~forward~~ pixel forward to a state corresponding to $G_o(t)$.

Page 10, paragraph comprising lines 13-23:

Typically, the response rate for gray level switching increases as the operating temperature of liquid crystal materials increases, and vice versa. Therefore, the voltage ODV can be adjusted according to an operating temperature, and further the dynamic gray level data $G_d(t)$ and the optimized driving voltage ~~Vd(t)~~ $V_d(t)$ can be adjusted for temperature compensation. In the present invention, the voltage ODV is inversely proportional to the operating temperature. That is, the voltage ODV and the optimized driving voltage ~~Vd(t)~~ $V_d(t)$ are lowered when the operating temperature increases, and vice versa.

Paragraph bridging pages 11 and 12:

In this case, the processor 42 determines an optimized driving voltage ~~Vd(t)~~ $V_d(t)$ according to the current gray level $G_o(t)$ and the previous gray level $G_o(t-1)$, and an equation of $\cancel{Vd(t) = V_o(t-1) + ODV}$ $V_d(t) = V_o(t-1) + ODV$. At this time, the voltage ODV is a minimum voltage capable of obtaining one gray level transition in a determined response time. Further, the polarity of the voltage ODV is determined according to the current gray level $G_o(t)$ and the previous gray level $G_o(t-1)$. For example, in positive frame, the polarity of the ODV is positive when $G_o(t) > G_o(t-1)$ and the polarity of the ODV is negative when $G_o(t) < G_o(t-1)$. Additionally,

in negative frame, the polarity of the voltage ODV is negative when $G_o(t) > G_o(t-1)$ and positive when $G_o(t) < G_o(t-1)$.

Page 12, paragraph comprising lines 10-24:

The processor 42 then determines the adjusted gray level $G_d(t)$ according to an equation of $\cancel{Vd(t) = a \times Gd(t)^3 + b \times Gd(t)^2 + c \times Gd(t) + d}$ $\underline{V_d(t) = a \times G_d(t)^3 + b \times G_d(t)^2 + c \times G_d(t) + d}$, a is -0.0004, b is 0.0037, c is -0.1443, and d is 8.6992. The driving chip 44 receives $G_d(t)$ and outputs a corresponding optimized driving voltage $V_d(t)$. Thus, a conventional driving chip can still be used to achieve the goal of the present invention. Therefore, the voltage ODV can be adjusted according to an operating temperature, and further, the dynamic gray level data $G_d(t)$ and the optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ can be adjusted for temperature compensation. In the present invention, the voltage ODV is inversely proportional to the operating temperature. That is, the voltage ODV and the optimized driving voltage ~~Vd(t)~~ $\underline{V_d(t)}$ are lowered when the operating temperature increases, and vice versa.